

## **ABSTRACT**

The present invention provides a vertical-cavity surface emitting laser (VCSEL) diode and a method for producing the same. In this method, an n-type and a p-type ohmic contact electrodes are previously disposed, and  
5 then two pairs of distributed Bragger reflectors (DBRs) are formed. At last, a permanent metal substrate is plated. According to the present invention, reflectivity of the DBRs can be preserved without damage during rapid thermal annealing, and thus brightness of the laser diode is improved.